

Amendments to the Claims:

Please cancel claims 69-86 and a second claim numbered claim 66; amend claims 3-10, 12, 14-16, 18-31, 34, 38, 41, 43-45, 51, 52, 55, 58, 59, 65, and 68; and add new claims 87-117. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of the Claims:

1. (Original) A magnetic holding device including: a) a support structure made of an iron alloy and having a substantially planar bearing surface; b) at least one magnetic or magnetisable region located in said support member; and c) insulating means made of non-magnetic material interposed between said region and said support structure to resist magnetic induction of, or leakage to, said support structure.
2. (Original) A magnetic holding device according to claim 1, wherein the device is in the form of a plate, having two opposed planar surfaces.
3. (Currently amended) A magnetic holding device according to either claim 1 ~~claim 2~~, wherein the device is rectangular.
4. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the device is used as a spacer plate in graphic art design processes and the magnetic holding device is between about 4 mm and 6.5 mm thick.
5. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the bearing surface of the spacer plate includes sizes of about 210 x 150 mm (A5 size), 300 x 210 mm (A4 size) or 420 x 300 mm (A3 size).
6. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the support structure includes one or more bores adapted to receive the one or more magnetic or magnetisable regions.
7. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the support structure is made of steel, including mild steel, case-hardened steel, stainless steel and the like.

8. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the at least one magnetic or magnetisable region includes a magnetisable core subject to an electric field to induce magnetism or is in the form of a permanent magnet.
9. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the magnetic holding device includes a plurality of magnetic or magnetisable regions in spaced relationship with one another.
10. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the one or more magnetic or magnetisable regions have a diameter of 2-10 mm.
11. (Original) A magnetic holding device according to claim 10, wherein the at least one magnetic region has a diameter of 3-6 mm.
12. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the at least one magnetic region has a substantially cylindrical shape.
13. (Original) A magnetic holding device according to claim 12, wherein the at least one magnetic region has an axial length less than the thickness of the support structure.
14. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the, the bore in which the magnetic region resides is in the shape of a cup, channel or block.
15. (Currently amended) A magnetic holding device according to ~~any one of claims~~ claim 1 to 13, wherein the bore in which the magnetic region resides is cylindrical.
16. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the device the distance separating the adjacent magnetic regions falls within the range of 5-25 mm.
17. (Original) A magnetic holding device according to claim 16, wherein the distance is 6-8 mm.
18. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the plurality of magnetic regions is orientated so that the north poles are co-planar.

19. (Currently amended) A magnetic holding device according to ~~any one of claims~~ claim 1 to 17, wherein the magnetic regions are grouped so that members within each group share the same pole in a common plane but have opposite poles to each adjacent group.

20. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein adjacent magnetic regions have opposite poles whereby to maximise the magnetic field intensity of any particular point on the bearing surface of the magnetic holding device.

21. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the insulating means is made from a wide range of non-magnetic materials effective to insulate the support structure against direct magnetic leakage.

22. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the magnetic regions include a magnetic surface which lies close to or flush with the planar bearing surface.

23. (Currently amended) A magnetic holding device according to ~~any one of claims~~ claim 1 to 21, wherein the magnetic surface lies flush with the planar bearing surface to maximise the magnetic force applied to a work piece, such as a steel backed die.

24. (Currently amended) A magnetic holding device according to ~~any one of claims~~ claim 1 to 21, wherein the magnetic surface lies just beneath the plane of the planar bearing surface to reduce the incidence of fatigue in the magnetic regions which may be sustained during a graphic art design process.

25. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the insulating means is made of any suitable non-magnetic material, for example, non-magnetic metals such as copper, brass, zinc or aluminium, copper alloys, aluminium alloys, magnesium alloys, nickel, titanium, or from other materials including polymeric materials including tempered glass fibre, metal fibre, carbon fibre or graphite fibre.

26. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the polymeric material includes a thermoset resin selected from the group including allyl polymers, epoxy polymers, furan, melamine formaldehyde, melamine phenolic polymers, phenolic polymers, polybutyldiene polymers, thermoset polyester and alkyd

polymers, thermoset polyamide polymers, thermoset polyurethane polymers, flexible thermoset silicone polymers, silicone epoxy polymers and thermoset ureapolymers.

27. (Currently amended) A magnetic holding device according to ~~any one of claims~~ claim 1 to 25, wherein the insulating means is copper alloy.

28. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the insulating means is in the form of a tube where the magnetic region extends from one face of the support structure through to its opposite face or in the form of a cup where the bore in which the region resides does not extend entirely through the support structure.

29. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the magnetic holding device is nickel plated, to provide resistance against rusting and scratching, due to the superior characteristics of nickel.

30. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein to enhance and improve heat conductivity, additional solid copper or brass rods are utilised in addition to insulated magnetic regions.

31. (Currently amended) A magnetic holding device according to ~~any one of the previous claims~~ claim 1, wherein the magnetic device for a hot foil stamping press employing a cylinder, is provided with engagement means to assist retention in the press.

32. (Original) A method of manufacturing a magnetic holding device including at least one magnetic body located in a support structure, said method including the steps of: a) forming at least one bore in said support structure, said support member being made from a hard iron alloy and having a substantially planar bearing surface; b) inserting insulating means made from non-magnetic material into said bore, said insulating means defining a hole substantially coaxial with said bore; and c) inserting the magnetic body into said hole, wherein said insulating means is interposed between said magnetic body and said support structure to resist magnetic induction of, or leakage to, said support structure.

33. (Original) A method of manufacturing a magnetic holding device including at least one magnetic body located in a support structure, said method including the steps of: a) forming at least one bore in said support structure, said support structure being made from an iron alloy and having a substantially planar bearing surface; b) inserting said body into insulating means to form an insulated body having an internal magnetic core surrounded by non-magnetic insulating

means; and c) inserting said insulated body into said bore, wherein said insulating means is interposed between said internal core and said support structure to resist magnetic induction of, or leakage to, said support structure.

34. (Currently amended) A method of manufacturing a magnetic holding device according to ~~either claim 32 or claim 33~~, wherein the bore may be formed in the support structure by any one of a range of means familiar to the person skilled in the art.

35. (Original) A method of manufacturing a magnetic holding device according to claim 34, wherein the bore is formed by machining the support structure and the bore may extends entirely through the support structure or may extend part way through to form a recess.

36. (Original) A method of manufacturing a magnetic holding device according to claim 35, wherein the bore is any suitable shape or configuration such as block, square, rectangular or triangular shaped.

37. (Original) A method of manufacturing a magnetic holding device according to claim 34 wherein, the magnetic body is preferably cylindrical or disc-shaped, and the bore is correspondingly cylindrical or cup shaped.

38. (Currently amended) A method of manufacturing a magnetic holding device according to claim 32 ~~or claim 33~~, wherein the magnetic body is inserted into the insulating means using correspondingly threaded or otherwise grooved means to mutually engage.

39. (Original) A method of manufacturing a magnetic holding device according to claim 38 wherein, the magnetic body is press fitted into the insulating means.

40. (Original) A method of manufacturing a magnetic holding device according to claim 38 wherein, the magnetic body is bonded into the insulating means by utilising an adhesive or other chemical compound.

41. (Currently amended) A method of manufacturing a magnetic holding device according to ~~either claim 32 or claim 33~~, wherein the insulated body is press fitted into the bore, relying on the malleability of the insulating means to ensure a tight fit.

42. (Original) A method of manufacturing a magnetic holding device according to claim 41 wherein, the retention of the insulated body in the bore is improved by utilising adhesive or other chemical means.

43. (Currently amended) A method of manufacturing a magnetic holding device according to claim 32 ~~or claim 33~~, wherein the wall thickness of the insulating means is between 10 μm and 3 mm.

44. (Currently amended) A method of manufacturing a magnetic holding device according to ~~either~~ claim 32 ~~or claim 33~~, wherein the outer wall of the insulating material is provided with a step or steps to help prevent the insulated magnetic core from being prematurely ejected from the magnetic plate under pressure from constant use.

45. (Currently amended) A method of manufacturing a magnetic holding device according to ~~either~~ claim 33 ~~or claim 34~~ wherein, the bearing surface of the magnetic holding device is substantially smooth and planar.

46. (Original) A method of manufacturing a magnetic holding device according claim 45 wherein, the planar bearing surface is ground using a grinding machine to render the bearing surface substantially planar.

47. (Original) A method of manufacturing a magnetic holding device according claim 46 wherein, the underside of the magnetic holding device is also ground to ensure a uniformly flat surface thereunder as well.

48. (Withdrawn) A metal conductor including: a support structure made of an iron alloy; a first region made of a relatively poor thermal and electrical conducting metal located in said support structure; and a second region made of a relatively good thermal and electrical conducting metal surrounding the first region from the support structure, whereby the rate of thermal and electrical conductivity of the metal conductor as a whole is better than the rate of the thermal or electrical conductivity of the second region material alone.

49. (Withdrawn) A metal conductor according to claim 48 wherein the support structure is cylindrical, corrugated, regular, spherical, block-shaped or planar.

50. (Withdrawn) A metal conductor according to claim 49, in the case of a hot foil stamping process, where the support structure is predominantly planar or cylindrically shaped.

51. (Currently amended and withdrawn) A metal conductor according to ~~any one of claims~~ claim 48 to 50, in which the support structure is made of steel, including mild steel, case-hardened steel, stainless steel, or carbon-steel.

52. (Currently amended and withdrawn) A metal conductor according to ~~any one of claims~~ ~~claim 48 to 51~~ wherein the second region is made from a variety of good thermal and/or electrical conducting materials, including copper, nickel, silver, gold, aluminium, zinc, magnesium, titanium, or a combination of two or more of the aforementioned, which is be used to form alloys such as copper alloys including brass, aluminium alloys and magnesium alloys.

53. (Withdrawn) A metal conductor including: a support structure made of an iron alloy; a first magnetic or magnetisable region located in the support structure; a second region made of a relatively good thermal and electrical conducting metal surrounding the first region, whereby the rate of thermal and electrical conductivity of the metal conductor as a whole is better than the rate of thermal or electrical conductivity of the second region material alone.

54. (Withdrawn) A metal conductor according to claim 53 in which the poor conducting metal of the first region includes metal alloys comprising a large proportion of iron and other elemental components similarly possessing poor heat and/or electrical conducting properties, including samarium cobalt (SmCo¹⁷) having a magnetic flux of 16-32 MGoe (Mega Gauss Orsted) and neodymium-iron-boron (NdFeB) with an MGoe of 24-48.

55. (Currently amended and withdrawn) A metal conductor according to claim 53 ~~or claim~~ 54, in which the first region comprises a plurality of separate regions forming islands each surrounded by a second region and set in the support structure.

56. (Withdrawn) A metal conductor according to claim 55, wherein the first regions are irregularly or randomly scattered throughout the surface of the support structure.

57. (Withdrawn) A metal conductor according to claim 55, in which the first region comprises a regular array of islands.

58. (Currently amended and withdrawn) A metal conductor according to ~~any one of claims~~ ~~claim 49 to 57~~, in which the first region is made from ferromagnetic material and is in the form of a plurality of discreet solid cylinders or plugs arranged in a regular array flush with the surface of the support structure.

59. (Currently amended and withdrawn) A metal conductor according to claim 58, ~~wherein~~ wherein the plugs extend from one external surface of the support structure to an opposed external surface.

60. (Original) A magnetic holding device including: a) a support structure made of an iron alloy including one or more recesses and having a bearing surface; b) at least one magnetic or magnetisable region located in said recess of said support structure; and c) insulating means made of non-magnetic material interposed between said region and said support structure to resist magnetic induction of, or leakage to, said support structure from said region.

61. (Original) A magnetic holder device according to claim 60, in which the bearing surface is in the form of a planar, cylindrical or otherwise curved surface.

62. (Withdrawn) A metal conductor including: a support structure made of an iron alloy; first poor conducting regions made of metal located in said support structure; second good conducting regions, each second good conducting region made of metal which surrounds one of the first regions from the support structure; and a third good conducting region intermediate at least two of the second good conducting regions, whereby the rate of thermal and electrical conductivity of the metal conductor as a whole is better than the rate of the thermal and electrical conductivity of the material of the second or third good conducting regions alone.

63. (Withdrawn) A metal conductor according to claim 62, in which the third good conducting region is preferably isolated from the second good conducting regions.

64. (Withdrawn) A metal conductor according to claim 63, wherein the third region is preferably embedded in the support structure.

65. (Currently amended and withdrawn) A metal conductor according to ~~any one of claims~~ claim 61 to 64 in which the third region is fixedly seated or inserted in a bore in the support structure.

66. (Withdrawn) A metal conductor according to claim 65, in which the first, second and third regions are arranged in a regular array, including equidistant relative to adjacent second regions.

66. (Canceled)

67. (Withdrawn) A metal conductor according to claim 66, in which the islands are rod-like, plate-like, cylindrical, conical, truncated conical, square or rectangular box-like, or cylindrical.

68. (Currently amended and withdrawn) A metal conductor according to claim 66 ~~or claim~~ 67, in which the islands are made from any non-ferrous metal or metal alloy such as copper or brass or any material of which the second region may be made.

69-86. (Canceled)

87. (New and withdrawn) A metal conductor according to claim 61 in which the third region includes a plurality of islands intermediate the second regions.

88. (New and withdrawn) A metal conductor according to claim 61 wherein it is formed from sub-units.

89. (New and withdrawn) A metal conductor according to claim 88 wherein two or more individual metal conductors are combined to present a larger unitary top bearing surface, being the sum of the individual sub-units.

90. (New and withdrawn) A metal conductor according to claim 89 wherein the metal conductors are plates, and the plates are abutted side by side to present a substantially seamless top bearing surface.

91. (New and withdrawn) A metal conductor according to claim 90 wherein at least one peripheral edge of each sub-unit may include alignment means to ensure the correct alignment of the sub-units.

92. (New and withdrawn) A metal conductor according to claim 91 wherein the alignment means include male or female components, such as a male component on a first sub-unit and a female component on a second sub-unit.

93. (New and withdrawn) A metal conductor according to claim 92 wherein the alignment means includes a tongue and groove, a pin and hole, rail and slot arrangements or any other suitable protrusion and recess combination.

94. (New and withdrawn) A metal conductor according to claim 93 wherein the sub-units exhibit little lateral magnetic attraction or repulsion to enable easy coaction of one sub-unit with another.

95. (New) A method for aligning a die having a top peripheral surface adjacent a relief surface to a magnetic holding device as described herein having a bearing surface in a graphic art design process including:

- a) aligning said magnetic holding device on a ferrous metal support;
- b) aligning said die on said magnetic holding device; and
- c) securing said die to said magnetic holding device by applying to said top peripheral surface and to said bearing surface a length of single sided adhesive tape,

wherein the adhesive is sufficiently strong to ensure that said die remains in position during said graphic art design process.

96. (New) A method for aligning a die according to claim 95 wherein the die is selected from brass, copper, magnesium, aluminium, zinc, or polymeric (or composites thereof).

97. (New) A method for aligning a die according to claim 95 wherein the die is 0.5mm to 2mm or 1/32 to 1/16 inch thick with the relief surface standing proud above the line of the remaining top surface of the die.

98. (New) A method for aligning a die according to claim 95 wherein the top peripheral surface extends around the entire top surface of the die.

99. (New) A method for aligning a die according to claim 95 wherein the top peripheral surface extends only along one edge of the die.

100. (New) A method for aligning a die according to claim 95 wherein the top peripheral surface is be recessed to permit the application of tape on its surface without rising above the line of the surface on which the relief is located.

101. (New) A method for aligning a die according to claim 100 wherein the top peripheral surface is between 5mm and 50mm wide.

102. (New) A method for aligning a die according to claim 100 wherein the depth of the recess is between 0.1mm and 2mm deep.

103. (New) A method for aligning a die according to claim 95 wherein the relief surface is central to the top surface of the die.

104. (New) A magnetic holding device according to claim 1 wherein the device is in the form of a plate having sufficient magnetic flux to stably adhere to the chase of a printing apparatus without being displaced during a production run, but is sufficiently movable by standard manual tools to achieve desired alignment of the die preparatory to a production run.

105. (New) A magnetic holding device according to claim 104 wherein the magnetic holding plate is of smaller plan proportions thereby to minimise the magnetic force applied by the magnetic holding plate to the chase as a whole.

106. (New) A magnetic holding device according to claim 105 comprising a combination of two or more magnetic holding plates being of smaller dimensions which are separately easily

manoeuvrable, but which may be combined to form a larger unitary bearing surface on which the die may be mounted.

107. (New) A magnetic holding device according to claim 106 wherein the sub-units include alignment means.

108. (New) A magnetic holding device according to claim 107 wherein the alignment means is located along one or more peripheral edges of the sub-unit and wherein adjacent sub-units may include complementary alignment means.

109. (New) A magnetic holding device according to claim 108 wherein the alignment means provide engagement means which are releasable when required to separately manipulate and re-align or remove one or more of the sub-units from the chase.

110. (New) A magnetic holding device according to claim 109 wherein the alignment means includes male and female components, selected from amongst tongue and groove, protrusion and hole, flange and slot, rail and recess arrangement and the like.

111. (New) A magnetic holding device according to claim 106 wherein the peripheral edges of the sub-units are cut to low tolerance by a high precision cutting implement, such as a wire cutter or a laser cutter, so that on abutment with an adjacent sub-unit, the top bearing surface presented to the die is virtually seamless.

112. (New) A method for aligning a die according to claim 95 in which the tape utilised is a tape which is high temperature resistant and suitable for use in a hot foil stamping process or any other graphic art design process involving elevated temperatures.

113. (New) A method for aligning a die according to claim 112 wherein the tape utilises an adhesive which is of a type that will not cure at the operating temperatures during the process and is easily removed without leaving residue.

114. (New) A method for aligning a die according to claim 113 wherein the backing of the tape may be a polymeric film such as polyamide or polyester, glass cloth tape, crepe paper masking tape, including smooth or mini or thicker crepe paper.

115. (New) A method for aligning a die according to claim 113 wherein the adhesive includes silicone adhesive for high temperature resistance and easy removal without leaving residue on the die or magnetic holding device.

116. (New) A method for aligning a die according to claim 95 including the further steps of:

- e) carrying out the graphic art design process; and subsequently
- f) peeling the tape off the top peripheral surface and the bearing surface, such that no adhesive residue remains on the top peripheral surface or the bearing surface and the die is not damaged by peeling of the tape in step f).

117. (New) A method for aligning a die according to claim 95 wherein, if the die has an original thickness greater than that desired for the graphic art design process, such as $\frac{1}{4}$ inch or 7mm, the method for adhering the die may further include a preliminary step involving cutting the die to a thickness of substantially 1.3mm or 1/16 inch.